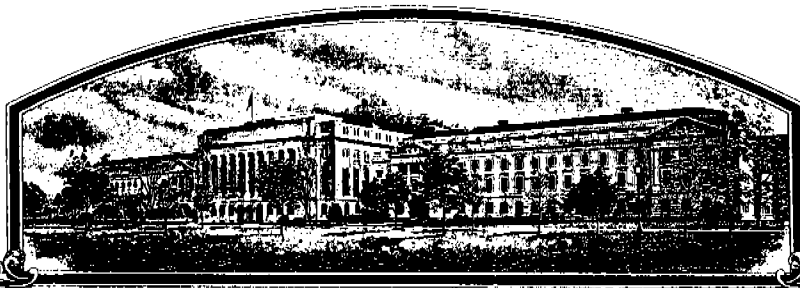


No.



7600079

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME;

Germain's, Inc.

Whereas, THERE HAS BEEN PRESENTED TO THE
Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF *seventeen* YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. THE UNITED STATES SEED OF THIS VARIETY (1) SHALL BE SOLD BY VARIETY NAME ONLY AS SEED OF CERTIFIED SEED AND (2) SHALL CONFORM TO THE NUMBER OF GENERATIONS PROVIDED BY THE OWNER OF THE RIGHTS. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

WHEAT

'W-444'

In Testimony Whereof, I have hereunto set
my hand and caused the seal of the Plant
Variety Protection Office to be affixed
at the City of Washington
this 20th day of December in
the year of our Lord one thousand nine
hundred and seventy-six

Attest:

[Signature]
Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

[Signature]
Secretary of Agriculture

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

INSTRUCTIONS: See Reverse.

1. VARIETY NAME OR TEMPORARY DESIGNATION W-444	2. KIND NAME Wheat	FOR OFFICIAL USE ONLY PVPO NUMBER 7600079	
3. GENUS AND SPECIES NAME Triticum aestivum	4. FAMILY NAME (Botanical) Gramineae	FILING DATE 6/11/76	TIME 8:45 A.M.
	5. DATE OF DETERMINATION June 10, 1975	FEE RECEIVED \$750.00	CHARGES —
6. NAME OF APPLICANT(S) Germain's, Inc.	7. ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code) Agricultural Div. Headquarters P. O. Box 12447 Fresno, CA 93777	8. TELEPHONE AREA CODE AND NUMBER P. O. Box 3233 Terminal Annex Los Angeles, CA 90051 209-233-8823	
9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: (Corporation, partnership, association, etc.) Corporation		10. STATE OF INCORPORATION California	11. DATE OF INCORPORATION 5/24/09

12. Name and mailing address of applicant representative(s), if any, to serve in this application and receive all papers:

Mr. Nathan A. Johnson, Research Agronomist
Germain's, Inc.
P. O. Box 12447
Fresno, CA 93777

13. CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:

- ☒ 12A. Exhibit A, Origin and Breeding History of the Variety (See Section 52, P.L. 91-577)
- ☒ 12B. Exhibit B, Botanical Description of the Variety
- ☒ 12C. Exhibit C, Objective Description of the Variety
- ☒ 12D. Exhibit D, Data Indicative of Novelty
- ☒ 12E. Exhibit E, Statement of the Basis of Applicant's Ownership

The applicant declares that a viable sample of basic seed of this variety will be deposited upon request before issuance of a certificate and will be replenished periodically in accordance with such regulations as may be applicable. (See Section 52, P.L. 91-577).

14A. Does the applicant(s) specify that seed of this variety be sold by variety name only as a class of certified seed? (See Section 83(a), P.L. 91-577) (If "Yes," answer 14B and 14C below.) ☒ YES ☐ NO

14B. Does the applicant(s) specify that this variety be limited as to number of generations? ☒ YES ☐ NO

14C. If "Yes," to 14B, how many generations of production beyond breeder seed?

Foundation, Registered, Certified

Applicant is informed that false representation herein can jeopardize protection and result in penalties.

The undersigned applicant(s) of this sexually-reproduced novel plant variety believes that the variety is distinct, uniform, and stable as required in Section 41 and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act (P.L. 91-577).

June 1, 1976

(DATE)

Nathan A. Johnson

(SIGNATURE OF APPLICANT)

(DATE)

(SIGNATURE OF APPLICANT)

INSTRUCTIONS

GENERAL: Send an original copy of the application, exhibits and \$50.00 fee to U.S. Dept. of Agriculture, Consumer and Marketing Service, Grain Division, Hyattsville, Maryland 20782. Retain one copy for your files. All items on the face of the form are self-explanatory unless noted below.

ITEM

5 Insert the date the applicant determined that he had a new variety.

12a First, give the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method. Second, give the details of subsequent stages of selection and multiplication. Third, indicate the type and frequency of variants during reproduction and multiplication and state how these variants may be identified. Fourth, provide evidence on stability.

12b First, give any special characteristics of the seed and of the plant as it passes through the seedling stage, flowering stage and the fruiting stage. Second, describe the mature plant and compare it with a similar commercial variety grown under the same conditions, and indicate the differences.

12c A supplemental form will be furnished by the PVPO to describe in detail a variety for each kind of seed.

12d Provide complete data indicative of novelty. Seed and plant specimens may be submitted and seeds submitted may be sterile. Where possible, include photographs of plant comparisons, chemical tests, etc.

12e Indicate whether applicant is the actual breeder, the employer of the breeder, the owner through purchase or inheritance, etc.

VERIFICATION SUB BY THE APPLICANT LEGAL COUNSEL REQUIRED

U.S. DEPARTMENT OF AGRICULTURE
CONSUMER AND MARKETING SERVICE

OFFICE OF THE ASSISTANT SECRETARY OF AGRICULTURE

EXHIBIT A

Origin and Breeding History of the Variety

1. W-444 originated from a selection out of W-433 which was developed from an F₂ segregating population from the CIMMYT Wheat Program in Mexico in 1969. Pedigree: Inia ((Sonora 64 X (Tezannos Pinto Precos X Yaqui 54)) CIMMYT Cross No. II-22370.

2. Successive generations were grown at Fargo, North Dakota and Yuma, Arizona. Commerical increases of W-433 were made before complete homozygosity was reached, therefore, white glumed and taller types were prevalent. Head selections were made at Fresno, California in 1973 from plants showing uniformity of large red glumed heads with no trace of Rust or Yellow Dwarf Virus. Successive increases were made in 1974 and 1975.

3. The variety W-444 has been stable for the last three generations and remains the same when reproduced.

00002

EXHIBIT B

Botanical Description of Variety

Height: Short-statured, 4 to 6 cm. shorter than Inia 66R.

Straw Strength: Very good straw strength with resistance to lodging. Superior to Inia 66R.

Shatter Resistance: Good shatter resistance, comparable to Inia 66R.

Grain Type: Hard red winter with good test weight - 62 to 66 lbs./bu.

Spike Characteristics: Awned, tapering, lax, red head approximately 11 cm. in length with medium length and medium width glumes, shoulder is oblique and beak is acuminate.

Disease Reactions: Tolerant to Barley Yellow Dwarf Virus, leaf and stem rust based on visual observations at five locations. No information available on other diseases.

Maturity: Heading time is similar to Inia 66R and about 10 days earlier than Anza. W-444 has spring growth habit and is insensitive to photoperiod.

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FORM GR-470-6
(2-15-73)UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
GRAIN DIVISION
HYATTSVILLE, MARYLAND 20782EXHIBIT C
(Wheat)OBJECTIVE DESCRIPTION OF VARIETY
WHEAT (TRITICUM SPP.)

INSTRUCTIONS: See Reverse.

NAME OF APPLICANT(S)

Germain's, Inc.

ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code)

Agricultural Division
P. O. Box 12447
Fresno, CA 93777Headquarters
P. O. Box 3233, Terminal Annex
Los Angeles, CA 90051

FOR OFFICIAL USE ONLY

PVPO NUMBER

VARIETY NAME OR TEMPORARY
DESIGNATIONPlace the appropriate number that describes the varietal character of this variety in the boxes below.
Place a zero in first box (e.g., 0 8 9 or 0 9) when number is either 99 or less or 9 or less.

1. KIND:

1 = COMMON 2 = DURUM 3 = EMMER 4 = SPELT 5 = POLISH 6 = POULARD 7 = CLUB

2. TYPE:

1 = SPRING 2 = WINTER 3 = OTHER (Specify) 1 = SOFT 2 = HARD 3 = OTHER (Specify)

1 = WHITE 2 = RED 3 = OTHER (Specify)

Grain Class - Hard Red Winter
Growth Habit - Spring

3. SEASON - NUMBER OF DAYS FROM EMERGENCE TO:

1 1 0 FIRST FLOWERING

1 2 0 LAST FLOWERING

4. MATURITY (50% Flowering):

0 0 NO. OF DAYS EARLIER THAN

7 1 = ARTHUR 2 = SCOUT 3 = CHRIS

0 0 NO. OF DAYS LATER THAN

7 4 = LEMHI 5 = NUGAINES 6 = LEEDS
7 = Inia 66-R

5. PLANT HEIGHT (From soil level to top of head):

1 0 4 CM. HIGH

CM. TALLER THAN

1 = ARTHUR 2 = SCOUT 3 = CHRIS

0 5 CM. SHORTER THAN

7 4 = LEMHI 5 = NUGAINES 6 = LEEDS
7 = Inia 66-R

6. PLANT COLOR AT BOOTING (See reverse):

2 1 = YELLOW GREEN 2 = GREEN 3 = BLUE GREEN

7. ANTER COLOR:

1 1 = YELLOW 2 = PURPLE

8. STEM:

1 Anthocyanin: 1 = ABSENT 2 = PRESENT

2 Hairiness of last internode of rachis: 1 = ABSENT 2 = PRESENT

0 5 NO. OF NODES (Originating from node above ground)

2 Waxy bloom: 1 = ABSENT 2 = PRESENT

1 Internodes: 1 = HOLLOW 2 = SOLID

2 3 CM. INTERNODE LENGTH BETWEEN FLAG LEAF AND LEAF BELOW

9. AURICLES:

2 Anthocyanin: 1 = ABSENT 2 = PRESENT

2 Hairiness: 1 = ABSENT 2 = PRESENT

10. LEAF:

2 Flag leaf at booting stage: 1 = ERECT 2 = RECURVED 3 = OTHER (Specify):

2 Flag leaf: 1 = NOT TWISTED 2 = TWISTED

1 Hairs of first leaf sheath: 1 = ABSENT 2 = PRESENT

2 Waxy bloom of flag leaf sheath: 1 = ABSENT 2 = PRESENT

2 0 MM. LEAF WIDTH (First leaf below flag leaf)

3 0 CM. LEAF LENGTH (First leaf below flag leaf)

00004

40512

11. HEAD:

☐ 1 Density: 1 = LAX 2 = DENSE

☐ 1 Shape: 1 = TAPERING 2 = STRAP
4 = OTHER (Specify)

☐ 4 Awedness: 1 = AWNLESS 2 = APICALLY AWNLETED 3 = AWNLETED 4 = AWNED

☐ 4 Color at maturity: 1 = WHITE 2 = YELLOW 3 = PINK 4 = RED
5 = BROWN 6 = BLACK 7 = OTHER (Specify):

☐ 1 ☐ 1 CM. LENGTH

☐ 1 ☐ 8 MM. WIDTH

12. GLUMES AT MATURITY:

☐ 2 Length: 1 = SHORT (CA. 7 mm.) 2 = MEDIUM (CA. 8 mm.)
3 = LONG (CA. 9 mm.)

☐ 2 Width: 1 = NARROW (CA. 3 mm.) 2 = MEDIUM (CA. 3.5 mm.)
3 = WIDE (CA. 4 mm.)

☐ 1 1 Glabrous 2 Pubescent

☐ 2 Shoulder 1 = WANTING 2 = OBLIQUE 3 = ROUNDED
shape: 4 = SQUARE 5 = ELEVATED 6 = APICULATE

☐ 3 Beak: 1 = OBTUSE 2 = ACUTE 3 = ACUMINATE

13. COLEOPTILE COLOR:

☐ 1 1 = WHITE 2 = RED 3 = PURPLE

14. SEEDLING ANTHOCYANIN:

☐ 1 1 = ABSENT 2 = PRESENT

15. JUVENILE PLANT GROWTH HABIT:

☐ 2 1 = PROSTRATE 2 = SEMI-ERECT 3 = ERECT

16. SEED:

☐ 1 Shape: 1 = OVATE 2 = OVAL 3 = ELLIPTICAL

☐ 1 Cheek: 1 = ROUNDED 2 = ANGULAR

☐ 1 Brush: 1 = SHORT 2 = MEDIUM 3 = LONG

☐ 1 Brush: 1 = NOT COLLARED 2 = COLLARED

☐ Phenol reaction 1 = IVORY 2 = FAWN 3 = LT. BROWN
(See instructions): 4 = BROWN 5 = BLACK

☐ 3 Color: 1 = WHITE 2 = AMBER 3 = RED 4 = PURPLE 5 = OTHER (Specify)

☐ 0 ☐ 8 MM. LENGTH

☐ 0 ☐ 3 MM. WIDTH

☐ 4 ☐ 1 GM. PER 1000 SEEDS

17. SEED CREASE:

☐ 2 Width: 1 = 60% OR LESS OF KERNEL 'WINOKA'
2 = 80% OR LESS OF KERNEL 'CHRIS'
3 = NEARLY AS WIDE AS KERNEL 'LEMHI'

☐ 1 Depth: 1 = 20% OR LESS OF KERNEL 'SCOUT'
2 = 35% OR LESS OF KERNEL 'CHRIS'
3 = 50% OR LESS OF KERNEL 'LEMHI'

18. DISEASE: (0 = Not Tested, 1 = Susceptible, 2 = Resistant) 3 = Tolerant

☐ 3 STEM RUST
(Races)

☐ 3 LEAF RUST
(Races)

☐ 0 STRIPE RUST
(Races)

☐ 0 LOOSE SMUT

☐ 0 POWDERY MILDEW

☐ 0 BUNT

☐ 3 OTHER (Specify) Barley Yellow Dwarf Virus

19. INSECT: (0 = Not Tested, 1 = Susceptible, 2 = Resistant)

☐ 0 SAWFLY

☐ 0 APHID (Bydv.)

☐ 0 GREEN BUG

☐ 0 CEREAL LEAF BEETLE

☐ OTHER (Specify) _____
HESSIAN FLY
RACES:

☐ GP ☐ A
☐ D ☐ E

☐ B ☐ C
☐ F ☐ G

20. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED:

CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
Plant tillering	W-433	Seed size	W-433
Leaf size	W-433	Seed shape	W-433
Leaf color	W-433	Coleoptile elongation	W-433
Leaf carriage	W-433	Seedling pigmentation	W-433

5 of 12

00005

EXHIBIT D

Data Indicative of Novelty

W-444 was first yield tested in 1975 in a replicated yield trial at Laton, California. (Table I) W-444 showed a 5% yield advantage over both W-433 and Inia 66R, and about a 4% advantage over Anza.

1976 replicated yield trials show W-444 with a slight yield advantage over W-433 and 5% advantage over Inia 66R. (Table II)

Milling quality of W-444 is expected to be equal to W-433 and Inia 66R which are considered to be good.

The most similar variety is in appearance Siete Cerros with the following differences:

- a) W-444 contains only red glumed plant types very similar to those of Siete Cerros.
- b) W-444 lodging resistance is slightly superior to W-433 (Table III) and superior to Inia 66R and Siete Cerros.
- c) W-444 has demonstrated a higher degree of tolerance to leaf and stem rust and Yellow Dwarf Virus than W-433. Disease free plant selections were a primary criteria in the development of W-444 (Table III).

Compared to a group of varieties of which W-444 is a member:

- a) W-444, when ripe, is similar in glume color to Siete Cerros.
- b) W-444 is the same maturity (50% flowering) as Inia 66R and 8-10 days earlier than Anza and Siete Cerros.
- c) Grain kernels of W-444 are slightly smaller than Inia 66R, but larger than Anza.
- d) W-444 kernels are red and Siete Cerros kernels are white to yellow.

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EXHIBIT E

Statement of Applicant's Ownership

Germain's, Inc., Los Angeles, California believes it is the sole, original and first breeder of the W-444 variety of wheat for which it solicits a certification of protection.

00007

TABLE III

AVERAGE OF FOUR REPLICATIONS @ FIVE LOCATIONS

TWO LOCATIONS SHOWED NO TRACE OF RUST OR YELLOW DWARF *

	<u>W-444</u>	<u>W-433</u>	<u>Inia 66R</u>	<u>Siete Cerros</u>
Lodging Score 1=10% Lodging	1.2	1.4	2.9	5.3
Leaf & Stem Rust 0-10, 0=No Rust	0.4	2.0	2.1	2.6
Yellow Dwarf Virus 0-10 0=No Rust	1.3	2.5	2.5	1.3

*Statistical Analysis Not Run

00008

CEREAL TECHNOLOGISTS

1435 Clay Street

• No. Kansas City, Mo. 64116 •

P. O. Box 7498

Doty

Laboratories

INCORPORATED

TELEPHONE-GRand 1-8580

James W. Doty — Director

Report for

Germain's, Inc.

P O Box 12447

Fresno, California 93777

Date July 30, 1976

Laboratory No. 9120 (9279)

Sample:

W-444 Wheat, Order No. 40851, 7/21

EXPERIMENTAL MILLING REPORT

WHEAT ANALYSIS

MOISTURE	9.60%
PROTEIN	13.40%
YIELD	69.9%

Milling Report: This wheat has very good milling properties.

00009

Geo H Wilson

CHEMIST

CEREAL TECHNOLOGISTS

1435 Clay Street

No. Kansas City, Mo. 64116

P. O. Box 7498

Doty

Laboratories

INCORPORATED

(816) TELEPHONE 471-8580

James W. Doty — Director

Report for Germain's, Inc.
P O Box 12447
Fresno, California 93777

Date July 30, 1976

Laboratory No. 9279 (9120)

CHEMICAL ANALYSES AND BAKING REPORT

IDENTITY	STANDARD	W-444, Wheat, Order No.	40851, 7/21
ASH		0.441%	
PROTEIN (Nx5.7)		11.71%	
MOISTURE		13.00%	
FLOUR COLOR		95 C	
ABSORPTION		66.5%	
MIXING		Normal	
FERMENTATION		Normal	
LOAF VOLUME		760cc (Very good)	
CRUST CHARACTER		Smooth	
CRUMB COLOR		95 C	
GRAIN AND TEXTURE		Sl.Open - Sl.Harsh	
GASSING POWER			
MALTOSE		Adjusted to proper level	

B—Bright, C—Creamy, CL—Close, D—Dull, G—Gray, O—Open, V—Very, Y—Yellow, SL—Slightly

Reported on a 14% Moisture Basis

Remarks— This flour has very good mixing strength. A normal dough mixing time produces good strong doughs and bread with very good loaf volume, and fair internal cell structurz. We consider this to be a good bakers flour.

FARINOGRAPH CURVE

MIXING PEAK— 6 1/2 Minutes
MIXING TOLERANCE— 12 3/4 Minutes
ABSORPTION— 60.9%

M.T.I.

30

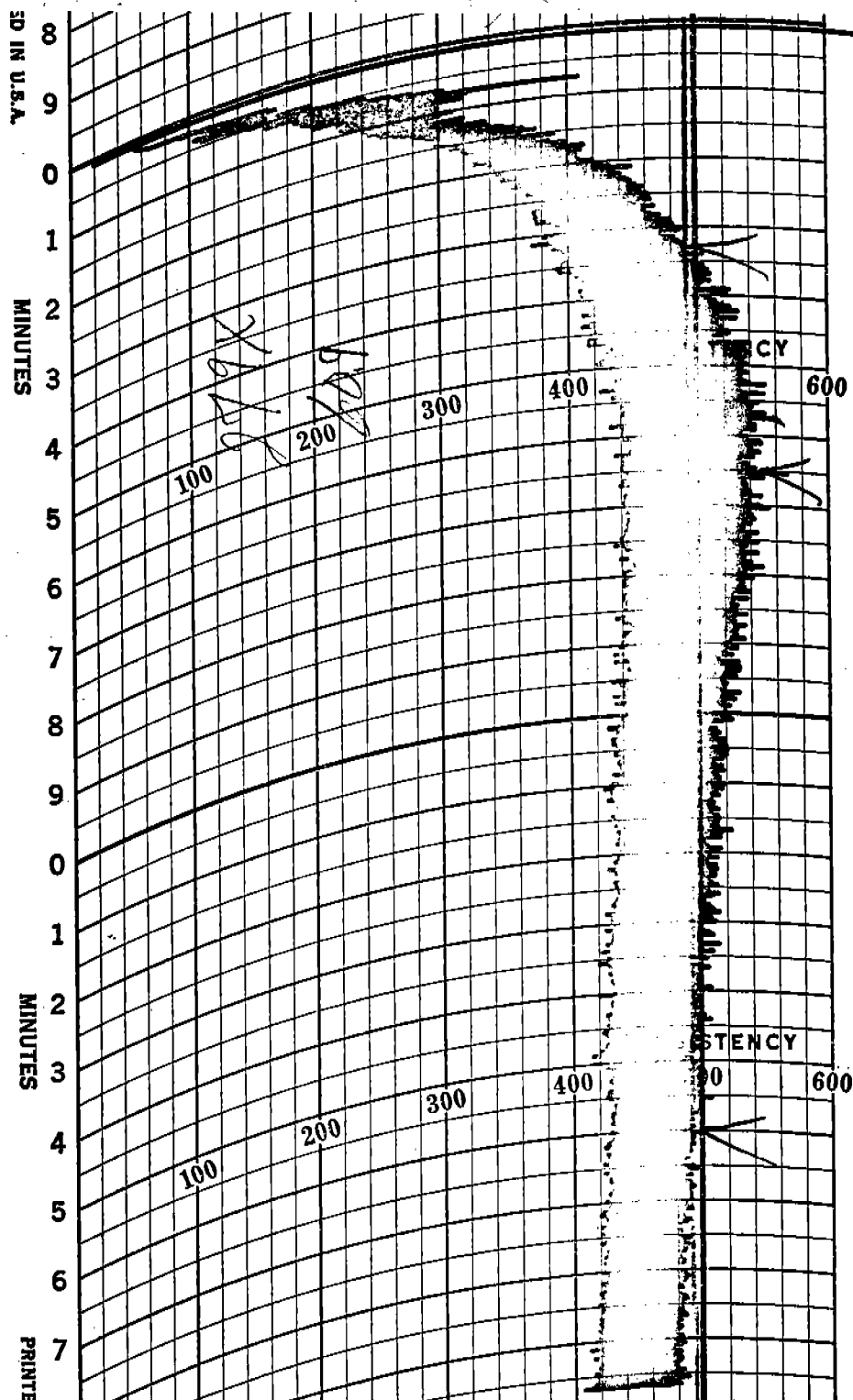
VALORIMETER

67

Geo B Wilson

CHEMIST

00010

FIRM GERMAIN'S Inc.Address Fresno, CASAMPLE IDENTIFICATION W-444 WHEAT,ORDER NO. 40851Mixing Peak 6 1/2 minsMixing Tolerance 12 3/4 minsAbsorption 60.9P.T. 30Velocimeter 67

00011

APPLICATION NO. 7600079
VARIETY NAME 'W-444'

Test Results Based on the American Association of Cereal Chemists Approved Method (AACC)

1. Straight dough development time ratio:

Farino graph 6-1/2

Dough-Mixer Normal

2.

Baking Ingredients	Arrival time-- minutes	Peak time	Stability-- minutes	Curve center height B.U.	Height at end B.U.
Yeast					
No yeast 1 hr. 45 Min. Rest	3-1/4	6-1/2	12-3/4	110	80
4 hr. rest					

3. Protein percentage 11.71 (Flour)

00012

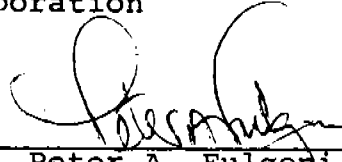
7600079

A S S I G N M E N T

For good and valuable consideration, receipt whereof is hereby acknowledged, the undersigned Germain's, Inc., a California corporation, of 4820 East 50th Street, Los Angeles, California 90058, does hereby sell, assign, transfer and set over to Germain's, Inc., a Delaware corporation, of 4820 East 50th Street, Los Angeles, California 90058, the entire right, title and interest in and to the plant varieties and Plant Variety Protection Certificates as set forth in Schedule 1 annexed hereto.

GERMAIN'S, INC., a California corporation

By

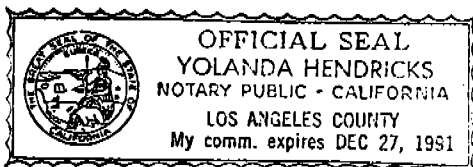


Peter A. Fulgoni
President

STATE OF CALIFORNIA)
) ss.
COUNTY OF LOS ANGELES)

On this 9th day of February, in the year 1989, before me, the undersigned, a Notary Public in and for said State, personally appeared Peter A. Fulgoni, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person who executed the within instrument as President on behalf of Germain's Inc., a California corporation, and acknowledged to me that the corporation executed it.

WITNESS my hand and official seal.



Yolanda Hendricks
Notary Public in and
for said State

PLANT PATENTS

<u>Name and Description</u>	<u>Country</u>	<u>Number</u>	<u>Effective Date</u>	<u>Expiration Date (Year)</u>	<u>Renewal Information</u>
<u>COTTON</u>					
Acala GC-362 ✓	U.S.A.	8400129	9/28/84	2001	
Acala GC-363 ✓	U.S.A.	8100060	3/24/83	2000	
Acala GC-445 ✓	U.S.A.	8100061	3/24/83	2000	
Acala GC-510	U.S.A.	8200166 8100066 <i>ok</i>	3/24/83	2000	
Acala GC-555	U.S.A.	8100062	3/24/83	2000	

WHEAT

Wheat W-444	U.S.A.	7600079	12/76	1993	
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